CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

73-720 Fred Waring Drive, Suite 100, Palm Desert, CA 92260 Phone (760) 346-7491• Fax (760) 341-6820 http://www.waterboards.ca.gov

SPECIAL BOARD ORDER R7-2009-0016 AMENDING
WASTE DISCHARGE REQUIREMENTS ORDER R7-2006-0050
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT NO. CA0104361 FOR THE
CITY OF HOLTVILLE, MUNICIPAL WASTEWATER TREATMENT PLANT
City of Holtville, Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter Regional Water Board), finds:

A. Background.

- 1. On June 21, 2006, the Regional Water Board adopted Board Order R7-2006-0050, NPDES Permit No. CA0104361, prescribing Waste Discharge Requirements for the City of Holtville (herein after Discharger) Municipal Wastewater Treatment Plant (WWTP) for the discharge of 0.85 million gallons per day (MGD) of secondary treated wastewater to the Pear Drain, a tributary to Alamo River, a water of the United States. Board Order R7-2006-0050 will expire on June 21, 2011.
- 2. The California Toxics Rule (CTR) (40 Code of Federal Regulations (CFR) section 131.38) and the State Water Resource Control Board's (State Water Board) Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Plan or SIP) establish specific criteria for freshwater and saltwater. When the salinity of receiving water is between 1 and 10 parts per thousand, such as is the case for the Pear Drain, the CTR and SIP provide for the Regional Water Board to prescribe in a permit the more stringent of the two criteria. Based on the foregoing, Board Order R7-2006-0050, as adopted by the Regional Water Board in 2006, includes interim¹ and final effluent limits for copper, nickel, and selenium that were developed based on saltwater and freshwater criteria. The final effluent limit for copper and nickel are based on saltwater criteria, which is more stringent than freshwater criteria for these pollutants.
- 3. In addition, the CTR and the SIP establish specific criteria for human health. Board Order R7-2006-0050, as adopted by the Regional Water Board in 2006, includes interim² and final effluent limits for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, and chrysene that were developed based on human health criteria.
- 4. The Discharger conducted a Biological Assessment at the location of the discharge. The objective of the Biological Assessment is to demonstrate scientifically whether water, plant life, and aquatic life at the discharge location are more typical of a saltwater or a freshwater environment. The areas of observation were approximately 100 meters upstream and 100 meters downstream of the discharge.

¹ The interim effluent limitations based on freshwater or saltwater criteria are for copper and selenium. This Amendment removes the final effluent limitations for copper, nickel and selenium.

² The interim effluent limitations based on human health criteria are for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, bis(2-ethyhexyl)phthalate and chrysene. This Amendment removes the final effluent limitations for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene and chrysene.

- 5. On February 11, 2008, the Discharger submitted the results of the Biological Assessment to the U.S. Environmental Protection Agency (USEPA) requesting approval to use alternative freshwater criteria at the location of the discharge pursuant to 40 CFR 131.38(c)(3). This assessment determined that the applicable reach of the Pear Drain is dominated by freshwater aquatic life and that freshwater criteria are more appropriate; therefore, saltwater aquatic life criteria are not applicable for this reach of the Pear Drain.
- 6. On January 15, 2009, following its review of the Biological Assessment submitted, USEPA issued a tentative approval of the findings in the Discharger's Biological Assessment and the application of water quality criteria for the protection of freshwater aquatic life.
- 7. Board Order No. R7-2006-0050 may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include, but are not limited to, the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan.
- 8. This Special Board Order revises Board Order R7-2006-0050 to designate the City of Holtville's discharge location at the Pear Drain as a freshwater environment. This Board Order establishes interim and final effluent limits based on CTR and SIP freshwater criteria for the discharge.
- 9. In accordance with section 1.3 of the SIP, the Regional Water Board staff conducted a Reasonable Potential Analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a water quality-based effluent limitation (WQBEL) was required in the Order. For the existing Board Order R7-2006-0050, the discharge demonstrates a reasonable potential to cause or contribute to an excursion above the applicable water quality standards based on freshwater and saltwater criteria for copper, nickel, and selenium. Based on the exclusion of saltwater criteria, the discharge did not demonstrate a reasonable potential to cause or contribute to an excursion above the applicable water quality standards for copper, nickel, or selenium; therefore, the effluent limitations for copper, nickel, and selenium have been discontinued.
- 10. Pursuant to 40 CFR 124.10(b) and 40 CFR 131.38(c)(3), a thirty (30) day public notice and comment period of USEPA's proposed tentative approval of the Biological Assessment and this revised Board Order are required prior to their becoming final. These public participation requirements provide stakeholders potentially affected by this action with an opportunity to object to or comment on the proposed tentative approval and revised Board Order.
- Pursuant to 40 CFR 124.10(b) and California Water Code (CWC) Section 13167.5, the Regional Water Board published Public Notice No. 7-09-07 for this proposed Board Order on February 27, 2009.

The 2006 USEPA 303(d) list of impaired waters (hereinafter 303(d) List) classifies the Pear Drain (Imperial Valley Drain) as impaired by toxaphene and selenium. Further, the Alamo River, to which the Pear Drain is tributary, is listed as impaired by pesticides and selenium. There is an EPA-approved Total Maximum Daily Load (TMDL) for sedimentation/siltation for the Alamo River. The sediment TMDL has established a Waste Load Allocation (WLA) for the Discharger for sediment of twice the current Total Suspended Solids (TSS) loading rate (13.7 tons per year). The TSS effluent limitations

contained in this Order are less than the WLA in the TMDL for the Discharger. In addition, the 303(d) List classifies the Salton Sea as impaired by nutrients. Tributaries to the Salton Sea, including the Alamo River, may be affected by future TMDLs for the Salton Sea and its tributaries. A nutrient TMDL is under development for the Salton Sea that may have adverse impacts on permitted discharges to tributaries to the Salton Sea (Alamo River and Rose Drain).

In addition, the 303(d) List classifies the Salton Sea as impaired by nutrients, salt and selenium. Tributaries to the Salton Sea, including the Alamo River, may be affected by the development of TMDLs for the Salton Sea. No TMDL has been developed to date for the Salton Sea, although a nutrient TMDL is under development for the Salton Sea that may impact the permitted discharges to tributaries to the Salton Sea (New River). The nutrient TMDL for the Salton Sea is tentatively scheduled for completion in 2009.

- **B. Facility Description.** The City of Holtville owns and operates the municipal wastewater treatment plant. The total design capacity of the wastewater treatment plant is 0.85 MGD. The treatment system consists of an influent bar screen, grit chamber, three circular primary clarifiers operated in parallel, a trickling filter, three secondary clarifiers operated in parallel, effluent flow meter, three sand filters, an ultraviolet (UV) disinfection system, an aerobic digester, and three sludge drying beds. The Discharger accepts septic tank and portable toilet waste and introduces the waste prior to primary treatment. Further, the City of Holtville operates a recreational vehicle (RV) dump station that services the winter residents and the resultant wastewater is brought to the Facility. This wastewater is also added to the collection system prior to primary treatment. Leachate from the sludge drying beds is returned to the plant headworks for treatment. Sludge is pumped to drying beds, dried, and is hauled away annually to Arizona for disposal. Wastewater is discharged to the Pear Drain, a tributary to the Alamo River, a water of the United States.
- C. California Environmental Quality Act (CEQA). This action to amend an NPDES permit is exempt from the provisions of Chapter 3 of CEQA (commencing with Section 21100) of Division 13 of the California Public Resources Code in accordance with Section 13389 of the CWC.
- **D. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations (see Attachment A of this Order for full details on Public Participation).
- **E.** Consideration of Public Comment. The Regional Water Board, in a public hearing, heard and considered all comments pertaining to the discharge.
- **F. Anti-degradation Policy.** 40 CFR 131.12 requires that state water quality standards include an anti-degradation policy consistent with the federal policy. To comply with this federal requirement, the State Water Board established California's anti-degradation policy in State Water Board Resolution No. 68-16, titled "Policy with Respect to Maintaining High Quality Waters of the State." Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires discharges to waters of the State be regulated to achieve the "highest water quality consistent with maximum benefit to the people of the State." It also establishes the intent that where waters of the State are of higher quality than that required by state policies, including Water Quality Control Plans, such higher quality "shall be maintained to the maximum extent possible" unless it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in plans and policies (e.g., violation of any water quality objective). The discharge is also required to meet waste discharge requirements that result in

the best practicable treatment or control necessary to assure that pollution or nuisance will not occur, and that the highest water quality consistent with maximum benefit to the people will be maintained.

The source water for the City of Holtville and the entire Imperial Valley is the Colorado River. Average annual precipitation in the Imperial Valley is insignificant (approximately 2 inches/year). Therefore, the Alamo River is an effluent-dominated surface water that also carries discharges from wastewater treatment plants (WWTPs); agricultural returns flows from Imperial Valley Drains that discharge tilewater and tailwater from farmlands: occasional operational spills of irrigation water from adjacent farmlands. Tailwater is irrigation water that does not percolate into the soil, and exits the lower end of the field into the drain. Tailwater tends to erode fields and thus acquire silt and sediments as it crosses and exits a field. Tilewater is water that has percolated through the soil, but is not absorbed by crops. Tilewater flushes salts from the soil. This highly saline water accumulates in tile lines beneath the fields. wherein it is transported to drains by gravity flow or a sump system. "background" water quality in the Alamo River is difficult to establish for the purpose of conducting a typical antidegradation analysis. It is likely that the Alamo River has historically contained "background" water from farmland³ that contains pollutants at concentrations that violate certain Basin Plan water quality objectives for those pollutants, in particular, pesticides. silt/sediment⁴, VOCs, nutrients, pathogens and selenium. The nutrients (e.g., phosphorous) discharged into the drains and Alamo River contribute to the nutrient impairment of the Salton Sea.

The discharge from the WWTP contains conventional pollutants (BOD, TSS, fecal coliform bacteria and pH) that are controlled through best practicable control technology currently available (BPT) and best available technology economically achievable (BCT) to prevent exceedances of the receiving water quality objectives for those pollutants and prevent adverse impacts on the REC-I and REC-II beneficial uses of the Alamo River. The discharge also contains TDS, but at concentrations significantly below the 4000 mg/L TDS WQO for the receiving water. Bis(2-ethylhexyl)phthalate has been measured in the discharge effluent from the treatment facility at concentrations above the numeric criteria for priority toxic pollutants for the State of California. This toxic pollutant is being controlled through WQBELs derived from water quality criteria established in the CTR. The established WQBELs for bis(2ethylhexyl)phthalate prevent adverse impacts of the beneficial uses of the river and ensure compliance with the Basin Plan. In addition, the concentrations of BOD, TSS, fecal coliform bacteria, and pH measured in the discharge are likely to lower water quality in the receiving water (i.e., cause degradation). For conventional pollutants, including BOD, TSS, fecal coliform and pH, this degradation is restricted to pollutants associated with domestic wastewater, is localized and will not result in water quality less than that prescribed in the Basin Plan. For bis(2-ethylhexyl)phthalate, a toxic pollutant, this degradation will not be significant once controlled and will not result in water quality less than that prescribed in the Basin Plan.

The discharge from the WWTP as permitted herein reflects best practicable treatment and control (BPTC) for the subject wastewater. The control is intended to assure that the discharge does not create a condition of pollution or nuisance and that the highest "background" water quality as defined above will be maintained. The WWTP incorporates:

- a. technology for equivalent to secondary treated domestic wastewater;
- b. effluent disinfection;

The agricultural return flows, however, have non-detectable levels of BOD and fecal coliform bacteria and have pH levels well within the receiving water quality objective of 6.0 to 9.0 pH Units.

Silt/sediment can be measured in terms of TSS.

- c. sludge handling facilities;
- d. an operation and maintenance manual;
- e. staffing to assure proper operation and maintenance; and
- f. standby emergency power generator of sufficient size to operate the necessary treatment units during periods of loss of commercial power.

The discharge is necessary to accommodate economic development in the area and essential public services for the City of Holtville, which are an important benefit to the State. Based on the foregoing, the discharge as permitted herein is consistent with Resolution No. 68-16.

IT IS HEREBY ORDERED, that Board Order R7-2006-0050 is amended in the manner specified below upon the effective date of this Special Board Order, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Special Board Order as well as with those portions of Board Order R7-2006-0050 that were not amended by this Special Board Order:

1. Page 10, IV.A.1.a, Final Effluent Limitations for Discharge Point 001. Replace Table 6 Final Effluent Limitations with the following table (New items are underlined and deleted items are shown in strikeout):

Table 6 Final Effluent Limitations

		Effluent Limitations				
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Daily Effluent Flow	Million Gallons Per Day (MGD)	0.85				
Biochemical Oxygen	mg/L	30	45			
Demand (BOD) (5- day @ 20°C)	lbs/day ⁵	210	320			
рН	standard units				6.0	9.0
Total Suspended	mg/L	30	45			
Solids (TSS)	lbs/day	210	320			
Copper, Total	μg/L	2.9		5.8		
Recoverable	lbs/day	0.021		0.041		
Nickel, Total	μg/L	6.8		14		
Recoverable	lbs/day	0.048		0.099		
Benzo(a)anthracene	μg/L	0.049		0.098		
Бенго(а)анинасене	lbs/day	0.00035		0.00069		
Bonzo(a)pyropo	μg/L	0.049		0.098		
Benzo(a)pyrene	lbs/day	0.00035		0.00069		
Benzo(b)fluoranthene	μg/L	0.049		0.098		
ььн∠о(ы)ньы анкнөнө	lbs/day	0.00035		0.00069		

⁵ The mass-based effluent limitations are based on a design capacity of 0.85 MGD

_

			Effluent Limitations					
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum		
Benzo(k)fluoranthene	μg/L	0.049		0.098				
Denzo(k)ndoranthene	lbs/day	0.00035		0.00069	1	1		
Bis(2-	μg/L	5.9		12				
ethylhexyl)phthalate	lbs/day	0.042		0.085				
Chrysono	μg/L	0.049		0.098	-	-		
Chrysene	lbs/day	0.00035		0.00069		-		
Ammonia, Total	mg/L	1.9		3.6				
(as N)	lbs/day	13		26				

2. Page 11, IV. A.2.b., Interim Effluent Limitations. Change IV.A.2.b. to IV.A.2.a. Replace Table 7 Interim Effluent Limitations with the following table (New items are underlined and deleted items are shown in strikeout):

Table 7 Interim Effluent Limitations

				Effluent Lin	nitations	
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total	μg/L	12		12		
Recoverable	lbs/day⁶	0.085		0.085		
Selenium, Total	μg/L	4.1	-	8.2	1	
Recoverable	lbs/day⁵	0.029	-	0.058		
Benzo(a)anthracene	μg/L	0.14		0.14		
Бенго(а)анинасене	lbs/day ⁵	0.00099	+	0.00099	-	
Benzo(a)pyrene	μg/L	0.1		0.1		
Бенго(а)ругене	lbs/day ⁵	0.00071		0.00071	1	
Benzo(b)fluoranthene	μg/L	0.1		0.1		
Denzo(b)nuorammene	lbs/day⁵	0.00071		0.00071		
Benzo(k)fluoranthene	μg/L	0.09		0.09		
Denzo(k)nuoranimene	lbs/day ⁵	0.00064		0.00064		
Bis(2-	μg/L	6.4		6.4		
ethylhexyl)phthalate	lbs/day ⁵	0.045		0.045		
Chrysono	μg/L	0.13		0.13		
Chrysene	lbs/day ⁵	0.00092		0.00092		
Ammonio	mg/L	23		34		
Ammonia	lbs/day ⁵	160		240		

- **3.** Page 13, VI. A.2. e. Replace this paragraph with the following:
 - e. The Discharger shall immediately notify the Regional Water Board by phone at (760) 346-7491, the local health officer or directors of environmental health with jurisdiction over affected water bodies and the Office of Emergency Services by phone at (800) 852-7550 to report any noncompliance that may endanger human health or the

6

⁶ The mass-based interim effluent limitations are based on a design capacity of 0.85 MGD

environment as soon as: (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures.

Although States and Regional Water Boards do not have duties as first responders, to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses, the following notification requirements are to be implemented:

- i. For any discharges of sewage that results in a discharge to a drainage channel or surface water, the Discharger shall, as soon as possible, but not later then two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the Regional Water Board.
- ii. As soon as possible, but no later then twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.
- iii. During non-business hours, the Discharger shall leave a voice message on the Regional Water Board's voice recorder. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Regional Water Board in accordance with the above time limits.
- **4.** Page 20, VI.C.7.a. Compliance Plan. Replace paragraph with the following paragraph (new items are underlined and deleted items are shown in strikeout):
 - a. **Compliance Plan.** The Discharger shall implement its compliance plan provided with its Infeasibility Report submitted on April 11, 2006 that identified the measures that will be taken to reduce the concentrations of copper, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, chrysene, and ammonia in its discharge to achieve compliance with the permit limitations specified in Effluent Limitations, IV.A.1.a. of this Order.
- **5.** Page 22, VI.C.7.b. Compliance Plan Annual Reports. Replace paragraph with the following paragraph (new items are underlined and deleted items are shown in strikeout):
 - b. **Compliance Plan Annual Reports.** The Discharger shall submit annual progress reports to describe the progress of studies and/or actions undertaken to reduce copper, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, chrysene, and ammonia in the effluent, and to achieve compliance with the limitations in this Order by the deadline specified in section IV.A.2.a. The Regional Water Board shall receive the first annual progress report at the same time the annual summary report is due, as required in Section X.B.3 of MRP in Attachment E.

6. Page E-4, IV.A.1. Table E-3 Effluent Monitoring Requirements. Replace Table E-3 with the following table (New items are underlined and deleted items are shown in strikeout):

Table E-3. Effluent Monitoring Requirements

Table E-3. Effluent Monitoring Requirements									
Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Reporting Level, units), respectively					
Daily Effluent Discharge (Flow)	MGD	Flow Meter Reading	Continuous	See Footnote 2					
Escherichia Coli (E. Coli)	Numb er/100 ml	Grab	5x/Month ³	See Footnote 3					
BOD 5-day 20℃	mg/L	24-Hr. Composite	1x/Week	See Footnote 4					
рН	pH Units	Grab	1x/Week	See Footnote 4					
Temperature	°F	Grab	1x/Week	See Footnote 4					
Total Suspended Solids	mg/L	24-Hr. Composite	1x/Week	See Footnote 4					
Ammonia Nitrogen, Total (as N)	mg/L	24-Hr. Composite	1x/Month	See Footnote 4					
Benzo(a)anthracene	μg/L	Grab	1x/Month	See Footnote 4					
Benzo(b)fluoranthene	μg/L	Grab	1x/Month	See Footnote 4					
Benzo(k)fluoranthene	μg/L	Grab	1x/Month	See Footnote 4					
Benzo(a)pyrene	μg/L	Grab	1x/Month	See Footnote 4					
Bis(2-ethylhexyl)phthalate	μg/L	Grab	1x/Month	See Footnote 4					
Chrysene	μg/L	Grab	1x/Month	See Footnote 4					
Copper, Total Recoverable	μg/L	Grab	1x/Month	See Footnote 4					
Nickel, Total Recoverable	μg/L	Grab	1x/Month	See Footnote 4					
Nitrates as Nitrogen (as N)	mg/L	24-Hr. Composite	1x/Month	See Footnote 4					
Nitrites as Nitrogen (as N)	mg/L	24-Hr. Composite	1x/Month	See Footnote 4					
Nitrogen, Total (as N)	mg/L	24-Hr. Composite	1x/Month	See Footnote 4					
Orthophosphate (as P)	mg/L	24-Hr. Composite	1x/Month	See Footnote 4					
Phosphate, Total (as P)	mg/L	24-Hr. Composite	1x/Month	See Footnote 4					
Selenium, Total Recoverable	μg/L	Grab	1x/Month	See Footnote 4					
Total Dissolved Solids	mg/L	24-Hr. Composite	1x/Month	See Footnote 4					
Oil and Grease	mg/L	Grab	1x/Year	See Footnote 4					
Priority Pollutants ⁵	μg/L	Grab	1x/Year	See Footnote 4					

² Report Total Daily Flow

Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

- **7.** Fact Sheet, Page F-9, III. C. 7. Anti-degradation Policy. Replace this section with Section F. Anti-degradation Policy beginning on Page 3 of this Special Order.
- 8. Fact Sheet, Page F-13, IV. C. 2., Table F-7 Applicable Beneficial Uses and Water Quality Criteria and Objectives. Replace Table F-7 with the following table (New items are underlined and deleted items are shown in strikeout):

Table F-7. Applicable Beneficial Uses and Water Quality Criteria and Objectives

				eria			
CTR No.	Parameter	Selected Criteria	Freshwater		Saltwater		Human Health for Consumption of:
			Acute	Chronic	Acute	Chronic	Organisms Only
		μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
2	Arsenic	<u>150</u>	340	150	69	36	
6	Copper	<u>23.72</u>	39.17	23.72	5.78	3.73	
7	Lead	<u>12.77</u>	327.8	12.77	220.82	8.52	
9	Nickel	<u>131.39</u>	1,181.74	131.39	74.75	8.28	4,600
10	Selenium	5.0		5.0	290.58	71.14	
13	Zinc	302.22	302.22	302.22	95.14	85.62	
60	Benzo(a)anthracene	0.049					0.049
61	Benzo(a)pyrene	0.049					0.049
62	Benzo(b)fluoranthene	0.049					0.049
64	Benzo(k)fluoranthene	0.049					0.049
68	Bis(2- ethylhexyl)phthalate	5.9					5.9
73	Chrysene	0.049					0.049
77	1,4-Dichlorobenzene	2,600					2,600
86	Fluoranthene	370					370
99	Phenanthrene	No Criteria					
100	Pyrene	11,000					11,000

9. Fact Sheet, Page F-14, IV. C. 3. Replace last paragraph prior to Table F-8 with the following:

The RPA was performed on available priority pollutant monitoring data and monthly monitoring data collected by the Discharger from July 2006 through November 2008. Based on the RPA, copper, nickel, selenium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene did not demonstrate reasonable potential to cause or contribute to an excursion above a water quality standard. Data used in the RPA are summarized in Table F-8.

The Discharger shall collect at least one sample per week. The Discharger may monitor E. coli using analytical methods, Standard Method 9221.F or 9223, (APHA.1998, 1995, 1992. Standard Methods for Examination of Water and Wastewater. American Public Health Association, 20th, 19th and 18 editions. Amer. Publ. Hlth. Assoc., Washington, D.C.) Compliance monitoring for the E. Coli effluent limitation shall begin on July 1, 2009.

10. Fact Sheet, Page F-14, IV. C. 3. Table F-8. Summary of Reasonable Potential Analysis. Replace Table F-8 with the following table (New items are underlined and deleted items are shown in strikeout):

Table F-8. Summary of Reasonable Potential Analysis

CTR No.	Parameter	Applicable Water Quality Criteria	Maximum Effluent Conc.	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
		(C) μg/L	(MEC) μg/L	(B) μg/L		
2	Arsenic	μg/L 150	μg/L 4.2	7.6	No	MEC and B < C
6	Copper	23.72	19	<10	No	MEC and B < C
7	Lead	12.77	0.7	2.9	No	MEC and B < C
9	Nickel	131.39	26	13	No	MEC and B < C
10	Selenium	5.0	<u><3.7</u>	6	No	B>C, however, MEC is ND
13	Zinc	302.22	79	18	No	MEC and B < C
60	Benzo(a)anthracene	0.049	<0.59	<0.05	<u>No</u>	MEC < C and B is ND
61	Benzo(a)pyrene	0.049	<0.49	<0.05	<u>No</u>	MEC < C and B is ND
62	Benzo(b)fluoranthene	0.049	<1.27	<0.05	<u>No</u>	MEC < C and B is ND
64	Benzo(k)fluoranthene	0.049	<u><1.75</u>	<0.05	<u>No</u>	MEC < C and B is ND
68	Bis(2- ethylhexyl)phthalate	5.9	<u>8.3</u>	<5	Yes	Trigger 1
73	Chrysene	0.049	<0.63	<0.05	<u>No</u>	MEC < C and B is ND
77	1,4-Dichlorobenzene	2,600	0.89	0.5	No	MEC < C and B is ND
86	Fluoranthene	370	0.27	<0.05	No	MEC < C and B is ND
99	Phenanthrene	No Criteria	0.17	<0.05	No	MEC < C and B is ND
100	Pyrene	11,000	0.28	<0.05	No	MEC < C and B is ND

ND = Not detected at or above detection limit for reporting

11. Fact Sheet, Page F-15, IV. C. 4. b. WQBELs Calculation Example. Replace this section with the following:

b. WQBELs Calculation Example

Using bis(2-ethylhexyl)phthalate as an example, the following demonstrates how WQBELs based on an aquatic life criterion were established for Order No. R7-2009-0016. The process for developing these limits is in accordance with section 1.4 of the SIP. Attachment I summarizes the development and calculation of all WQBELs for this Order using the process described below.

DNQ = Detected, but not quantified

[&]quot;—" = Priority pollutant monitoring data not available

Step 1: For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each criterion determine the effluent concentration allowance (ECA) using the following steady state equation:

ECA = C + D(C-B) when C>B, and ECA = C when C<=B,

Where

C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 298 mg/L (as CaCO₃) was used for development of hardness-dependant criteria, and a pH of 7.8 was used for pH-dependant criteria.

D = The dilution credit, and

B = The ambient background concentration

For this Order, dilution was not allowed due to the nature of the receiving water and quantity of the effluent; therefore:

ECA = C

For bis(2-ethylhexyl)phthalate, the applicable water quality criteria are:

ECA_{acute}= Not Applicable ECA_{chronic}= Not Applicable ECA_{human health}= 5.9 μg/L

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 3 of the SIP and will not be repeated here.

LTA_{acute} = ECA_{acute} x Multiplier_{acute} LTA_{chronic}= ECA_{chronic} x Multiplier_{chronic}

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

For bis(2-ethylhexyl)phthalate, the following data was used to develop the acute and chronic LTA using Table 1 of the SIP:

No. of Samples	<u>CV</u>	<u>Multiplier_{acute}</u>	<u>Multiplier_{chronic}</u>
31	0.60	0.321	0.527

 $LTA_{acute} =$ Not Applicable $\mu g/L \times 0.321 = Not$ Applicable $LTA_{chronic} =$ Not Applicable $\mu g/L \times 0.527 = Not$ Applicable

Step 3: Select the most limiting (lowest) of the LTA.

LTA = most limiting of LTA_{acute} or LTA_{chronic}

For bis(2-ethylhexyl)phthalate, the most limiting LTA was the LTA_{chronic} LTA = Not Applicable

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitations (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 5 of the SIP and will not be repeated here.

AMEL_{aquatic life} = LTA x AMEL_{multiplier} MDEL_{aquatic life} = LTA x MDEL_{multiplier}

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For bis(2-ethylhexyl)phthalate, the following data was used to develop the AMEL and MDEL for aquatic life using Table 2 of the SIP:

No. of Samples CV Multiplier_{MDEL} Multiplier_{AMEL}
4 0.60 3.11 1.55

AMEL_{aquatic life} = Not Applicable x 1.55 = Not Applicable MDEL_{aquatic life} = Not Applicable x 3.11 = Not Applicable

Step 5: For the ECA based on human health, set the AMEL equal to the ECA_{human health}

 $AMEL_{human\ health} = ECA_{human\ health}$

For bis(2-ethylhexyl)phthalate:

 $AMEL_{human health} = 5.9 \mu g/L$

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of the Multiplier_{MDEL} to the Multiplier_{AMEL}. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

 $MDEL_{human health} = AMEL_{human health} \times (Multiplier_{MDEL} / Multiplier_{AMEL})$

For bis(2-ethylhexyl)phthalate, the following data was used to develop the MDEL_{human} health:

 $\begin{array}{c|cccc} \underline{\text{No. of Samples}} & \underline{\text{CV}} & \underline{\text{Multiplier}}_{\underline{\text{MDEL}}} & \underline{\text{Multiplier}}_{\underline{\text{AMEL}}} & \underline{\text{Ratio}} \\ 4 & 0.60 & 3.11 & 1.55 & 2.01 \end{array}$

 $MDEL_{human health} = Not Applicable$

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the water-quality based effluent limit for the Order.

For bis(2-ethylhexyl)phthalate:

 $\begin{array}{c|cccc} \underline{AMEL}_{aquatic\;life} & \underline{MDEL}_{aquatic\;life} & \underline{AMEL}_{human\;health} & \underline{MDEL}_{human\;health} \\ Not\;Applicable & Not\;Applicable & 5.9\;\mu g/L & 11.9\;\mu g/L \end{array}$

The lowest (most restrictive) effluent limits, those based on human health criteria, were incorporated into this Order.

12. Fact Sheet, Page F-18, Table F-9. Summary of WQBELs. Replace table F-9 with the following table (New items are underlined and deleted items are shown in strikeout font):

Table F-9. Summary of Water Quality-based Effluent Limitations

•		y-based Emuent Effluent Li	
Constituent	Units	Average Monthly	Maximum Daily
Copper	μg/L	2.9	5.8
oopper	lbs/day	0.021	0.041
Nickel	μg/L	6.8	14
INIONOI	lbs/day	0.048	0.099
Selenium	μg/L	4.1	8.2
Scienium	lbs/day	0.029	0.058
Panza/a)anthracana	μg/L	0.049	0.098
Benzo(a)anthracene	lbs/day	0.00035	0.00069
Bonzo(a)pyrono	μg/L	0.049	0.098
Benzo(a)pyrene	lbs/day	0.00035	0.00069
Danza/h)fluaranthana	μg/L	0.049	0.098
Benzo(b)fluoranthene	lbs/day	0.00035	0.00069
Benzo(k)fluoranthene	μg/L	0.049	0.098
венго(к)ниоганинене	lbs/day	0.00035	0.00069
Bis(2-	μg/L	5.9	12
ethylhexyl)phthalate	lbs/day	0.042	0.085
Chrysono	μg/L	0.049	0.098
Chrysene	lbs/day	0.00035	0.00069
Ammonio	mg/L	1.9	3.6
Ammonia	lbs/day	13	26

The mass-based effluent limitations are based on a design capacity of 0.85 MGD.

13. Fact Sheet, Page F-21, Table F-10 Final Effluent Limitations. Replace Table F-10 with the following table (New items are underlined and deleted items are shown in strikeout font):

Table F-10. Summary of Final Effluent Limitations

	Effluent Limitations						
Parameter	Units	Average	Average	Maximum	Instantaneous	Instantaneous	Basis
		Monthly	Weekly	Daily	Minimum	Maximum	
Flow	MGD	0.85					
5-day BOD	mg/L	30	45			O	40 CFR 133
	lbs/day ⁷	210	320				
Total Suspended Solids	mg/L	30	45			0	40 CFR 133
	lbs/day	210	320				
рН	pH units				6.0	9.0	40 CFR 133
Removal Efficiency for BOD and TSS	%	85		(40 CFR 133
Copper, Total Recoverable	μg/L	2.9		5.8	_	-	CTR, SIP
riccoverable	lbs/day	0.021		0.041			
Nickel, Total Recoverable	μg/L	6.8	<i>></i> (14		•	CTR, SIP
Hecoverable	lbs/day	0.048		0.099			
Selenium, Total Recoverable	μg/L	4.1		8.1	_	-	CTR, SIP
Hecoverable	lbs/day	0.029		0.058			
Benzo(a)anthrac	μg/L	0.049	-	0.098		-	CTR, SIP
Che	lbs/day	0.00035		0.00069			
Benzo(a)pyrene	μg/L	0.049		0.098	_	1	CTR, SIP
	lbs/day	0.00035		0.00069		-	
Benzo(b)fluorant	μg/L	0.049		0.098		-	CTR, SIP
hene	lbs/day	0.00035		0.00069		-	
Benzo(k)fluorant hene	μg/L	0.049		0.098			CTR, SIP
HUHU	lbs/day	0.00035		0.00069			
Bis(2- ethylhexyl)phthal	μg/L	5.9		12			CTR, SIP
ate	lbs/day	0.042		0.085			
Chrysene	μg/L	0.049	_	0.098	_	_	CTR, SIP

 $^{^{\}rm 7}$ The mass-based effluent limitations are based on a design capacity of 0.85 MGD.

				Effluent L	imitations		
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Basis
	lbs/day	0.00035	-	0.00069			
Ammonia, Total (as N)	mg/L	1.9		3.6			Basin Plan
(as IV)	lbs/day	13		26			

14. Fact Sheet, Page F-22, IV. E. Interim Effluent Limitations. Delete the following paragraphs and renumber paragraph IV.E. 6 as IV.E. 2.

Delete paragraphs IV.E. 2 through IV.E. 5

15. Fact Sheet, Page F-24, IV. E. Table F-11 Interim Effluent Limitations. Replace Table F-11 with the following table (New items are underlined and deleted items are shown in strikeout font):

Table F-11 Interim Effluent Limitations

Parameter	Unit	Date Effluent Limit Becomes Effective	Maximum Daily Effluent Limit	Average Monthly Effluent Limit
Copper (interim)	μg/L	June 21, 2006	12	12
Copper (interim)	lbs/day⁸	June 21, 2006	0.085	0.085
Copper (final)	μg/L	May 18, 2010	5.8	2.9
Copper (final)	lbs/day	May 18, 2010	0.041	0.021
Benzo(a)anthracene (interim)	μg/L	June 21, 2006	0.14	0.14
Benzo(a)anthracene (interim)	lbs/day	June 21, 2006	0.00099	0.00099
Benzo(a)anthracene (final)	μg/L	May 18, 2010	0.098	0.049
Benzo(a)anthracene (final)	lbs/day	May 18, 2010	0.00069	0.00035
Benzo(a)pyrene (interim)	μg/L	June 21, 2006	0.1	0.1
Benzo(a)pyrene (interim)	lbs/day	June 21, 2006	0.00071	0.00071
Benzo(a)pyrene (final)	μg/L	May 18, 2010	0.098	0.049
Benzo(a)pyrene (final)	lbs/day	May 18, 2010	0.00069	0.00035
Benzo(b)fluoranthene (interim)	μg/L	June 21, 2006	0.1	0.1
Benzo(b)fluoranthene (interim)	lbs/day	June 21, 2006	0.00071	0.00071
Benzo(b)fluoranthene (final)	μg/L	May 18, 2010	0.098	0.049
Benzo(b)fluoranthene (final)	lbs/day	May 18, 2010	0.00069	0.00035
Benzo(k)fluoranthene (interim)	μg/L	June 21, 2006	0.09	0.09
Benzo(k)fluoranthene (interim)	lbs/day	June 21, 2006	0.00064	0.00064

 $^{^{\}rm 8}$ The mass-based effluent limitations are based on a design capacity of 0.85 MGD.

-

Parameter	Unit	Date Effluent Limit Becomes Effective	Maximum Daily Effluent Limit	Average Monthly Effluent Limit
Benzo(k)fluoranthene (final)	μg/L	May 18, 2010	0.098	0.049
Benzo(k)fluoranthene (final)	lbs/day	May 18, 2010	0.00069	0.00035
Bis(2- ethylhexyl)phthalate (interim)	μg/L	June 21, 2006	6.4	6.4
Bis(2- ethylhexyl)phthalate (interim)	lbs/day	June 21, 2006	0.045	0.045
Bis(2- ethylhexyl)phthalate (final)	μg/L	May 18, 2010	12	5.9
Bis(2- ethylhexyl)phthalate (final)	lbs/day	May 18, 2010	0.085	0.042
Chrysene (interim)	μg/L	June 21, 2006	0.13	0.13
Chrysene (interim)	lbs/day	June 21, 2006	0.00092	0.00092
Chrysene (final)	μg/L	May 18, 2010	0.098	0.049
Chrysene (final)	lbs/day	May 18, 2010	0.00069	0.00035
Ammonia (interim)	mg/L	June 21, 2006	34	23
Ammonia (interim)	lbs/day	June 21, 2006	240	160
Ammonia (final)	mg/L	May 18, 2010	3.6	1.9
Ammonia (final)	lbs/day	May 18, 2010	26	13

^{16.} Attachment I, Page I-1, Summary Water Quality-Based Effluent Limit Calculations. Replace the table with the revised Attachment I.

I, Robert E. Perdue, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on May 21, 2009.



Attachment I – Summary Water Quality-Based Effluent Limit Calculations

The water quality-based effluent limits developed for this Board Order are summarized below and were calculated as described in the methodology summarized in Attachment F, Fact Sheet and are contained in Section IV.A.1.c of this Order. (New items are underlined and deleted items are shown in strikeout).

Priority Pollutant	Human Health Calculations			Aquatic Life Calculations											Selected Limits	
	Human Health			Saltwater / Freshwater												
	AMEL = ECA = C hh	MDEL/AME L multiplier	MDEL hh	ECA acute = C acute	ECA acute multipli er	LTA acute	ECA chronic = C chronic	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multipli er 95	AMEL aquatic life	MDEL multiplier 99	MDEL aquatic life	AMEL	MDEL
	μg/L		μg/L	μg/L		μg/L	μg/L		μg/L	μg/L		μg/L		μg/L	μg/L	μg/L
Copper				5.78	0.32	1.86	3.73	0.53	1.97	1.86	1.55	2.88	3.11	5.78	2.9	5.8
Nickel	4,600	2.01	9,228	74.75	0.32	24	8.28	0.53	4.37	4.37	1.55	6.78	3.11	13.6	6.8	14
Selenium							5.0	0.53		0.53	1.55	4.09	3.11	8.21	4.1	8.2
Benzo(a)anthrace ne	0.049	2.01	0.098		-			_		1	-	_		-	0.049	0.098
Benzo(a)pyrene	0.049	2.01	0.098		-	1	_	-	-	-	1	-	-	_	0.049	0.098
Benzo(b)fluoranth ene	0.049	2.01	0.098			1	<u> </u>				-	-			0.049	0.098
Benzo(k)fluoranth ene	0.049	2.01	0.098		1					1	-				0.049	0.098
Bis(2- ethylhexyl)phthala te	5.9	2.01	11.84	1	-	1				1	1				5.9	12
Chrysene	0.049	2.01	0.098		-	-	-		-	-		-			0.049	0.098
Ammonia				18	0.34	6.2	2.2	0.55	1.2	1.2	1.5	1.9	2.9	3.6	1.9	3.6

Notes:

C = Water Quality Criteria

hh = human health

AMEL = Average monthly effluent limitation

MDEL = Maximum daily effluent limitation

ECA = Effluent concentration allowance

LTA = Long-term average concentration

ATTACHMENT A – PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) is considering the amendment of Waste Discharge Requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for City of Holtville's Wastewater Treatment Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was published in the following newspapers: Desert Sun and Imperial Valley Press. In addition, copies of the proposed permit were sent to interested agencies and persons.

B. Written Comments

The Regional Water Board staff's determinations are tentative. Interested persons are invited to submit written comments concerning this tentative Special Board Order. Comments should be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order.

Comments made in reference to the Biological Assessment and USEPA's approval letter should be directed to:

Matthew Mitchell USEPA 75 Hawthorne Street (WTR-5) San Francisco, CA 94105

Comments made in reference to the Tentative Special Board Order should be directed to:

California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

To be fully responded to by staff and considered by the Regional Water Board and USEPA, written comments should be received at the Regional Water Board and USEPA offices by 5:00 p.m. on April 8, 2009.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative Special Board Order during its regular Board meeting on the following date and time and at the following location:

Date: May 21, 2009 Time: 10:00 a.m.

Location: Palm Desert Council Chambers

City of Palm Desert 73-510 Fred Waring Drive Palm Desert, CA 92260

Interested persons are invited to attend. At the public hearing, the Regional Water Board will take testimony pertinent to the discharge and tentative Special Board Order. For accuracy of the record, however, a written copy of the proposed oral testimony to be given should be provided prior to or at the hearing.

Please be aware that dates and venues of the Regional Water Board's public meeting and hearing may change. The latest information concerning any scheduling changes can be found at the Regional Water Board's website: http://www.waterboards.ca.gov/coloradoriver/.

If you are disabled and require special accommodations to participate in this public meeting and hearing, please contact Hilda Vasquez at (760) 776-8950 no later than ten (10) days before the scheduled event.

D. Waste Discharge Requirements Petitions

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and the California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public notices/petitions/water quality

or will be provided upon request.

State Water Resources Control Board Office of Chief Counsel P.O. Box 100, 1001 I Street Sacramento, CA 95812-0100

E. Information and Copying

Information related to the discharge facility and this proposed amendment, including any comments received on the proposed amendment, are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (760) 346-7491.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this tentative Special Board Order should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this draft Special Board Order should be directed to John Carmona, Senior Water Resources Control Engineer, at (760) 340-4521.